

- 1. (amended) An artificial antigen presenting cell, comprising:
 - a) a liposome comprising a lipid bilayer;
 - b) at least one GM-1 molecule disposed in the lipid bilayer;
 - c) at least a portion of a cholera toxin \(\beta \) subunit associated with a GM-1 molecule;
 - d) an immunologically active MHC component loaded with an antigen, wherein the antigen-loaded MHC component is associated with the cholera toxin ß subunit; and
 - e) an accessory molecule that can stabilize an interaction between a T cell receptor and the antigen-loaded MHC component.
- 2. (amended) An artificial antigen presenting cell according to claim 1 having a plurality of GM-1 molecules, wherein a portion of the GM-1 molecules form rafts in the lipid bilayer of the liposome.
- 3. (amended) An artificial antigen presenting cell according to claim 2 wherein the rafts are present in the lipid bilayer at high density.
- 4. (amended) An artificial antigen presenting cell according to claim 3 further comprising one or more immunologically active molecules each selected from the group consisting of costimulatory molecules, adhesion molecules, cell modulation molecules, and combinations of one or more of a co-stimulatory molecule, an adhesion molecule, and a cell modulation molecule.
- 5. (amended) An artificial antigen presenting cell according to claim 3 further comprising one or more irrelevant molecules each selected from the group consisting of molecules for binding said artificial antigen presenting cell to a solid support, a label, and a combination of support-binding molecules and labels.
- 6. (amended) An artificial artigen presenting cell, comprising:
 - a) a liposome comprising a lipid bilayer;
 - b) at least one GM-1 molecule disposed in the lipid bilayer;
 - c) at least a portion of a cholera toxin ß subunit associated with a GM-1 molecule;
 - d) at least one tetravidin molecule associated with the lipid bilayer;



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e) an immuno (ogically active MHC component loaded with an antigen, wherein the MHC component is associated with the cholera toxin β subunit; and

- an accessory molecule that can stabilize an interaction between a T cell receptor and the antigen-loaded MHC component, wherein the accessory molecule is associated with a tetravidin molecule of (d).
- (amended) An artificial antigen presenting cell according to claim 6 having a plurality 7. of GM-1 molecules, wherein a portion of the GM-1 molecules form rafts in the lipid bilayer of the liposome.

- (amended) An artificial antigen presenting cell according to claim 7 wherein the rafts are 8. present in the lipid bilayer at high density.
- (amended) An artificial antigen presenting cell according to claim 8 further comprising 9. one or more immunologically active molecules each selected from the group consisting of costimulatory molecules, adhesion molecules, cell modulation molecules, and combinations of one or more of a co-stimulatory molecule, an adhesion molecule, and a cell modulation molecule.
- 10. (amended) An artificial antigen presenting cell according to claim 8 further comprising one or more irrelevant molecules each selected from the group consisting of molecules for binding said artificial antigen presenting cell to a solid support, a label, and a combination of support-binding molecules and labels.
- In the Specification. Please replace the title of the invention with the title below. B.

(new title) Artificial Antigen Presenting Cells